The Pragmatic Evolution of the Monetary Standard

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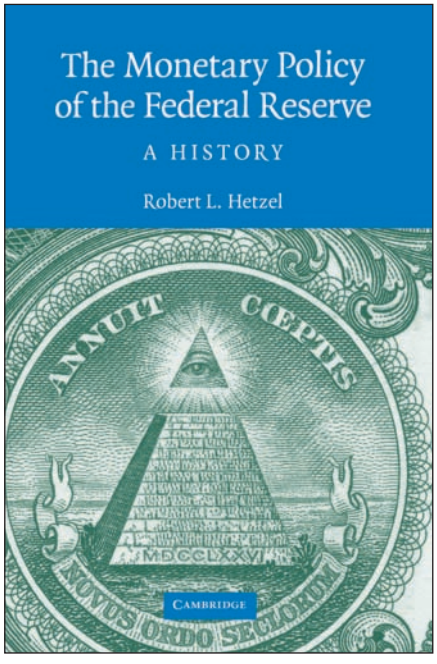
Vast, horrific disasters marked the 20th century, but also widespread, beneficent progress. In the first half, two world wars almost ended Western civilization. In the second half, democracy spread and living standards rose. Throughout, monetary instability interacted with social upheaval and political disorder. Inflation and deflation created feelings of powerlessness in the face of impersonal forces that promoted a search for scapegoats. Hyperinflation and depression contributed to the rise of Nazism in Germany. The stability of the deutschemark then accompanied the German postwar growth miracle.

In the United States, deflation and depression in the 1930s produced a decade of untold human misery. The Great Inflation of the 1970s spawned wage and price controls, which trampled on due process. The feeling of government's loss of control, symbolized by gas lines, helped propel Ronald Reagan into power. After Paul Volcker led the Fed to accept responsibility for inflation in 1979, an increase in monetary stability accompanied an increase in economic stability.

The success of the 21st century will depend upon how well societies learn the lessons of the 20th century. The grand monetary experiment of the last century was replacement of a gold standard with a fiat money standard. The failure of central banks to understand their new responsibility to provide a nominal anchor for prices lay at the heart of the spectacular monetary failures of that century. What nominal anchor and what monetary standard are in place at the start of the current century?



The Volcker-Greenspan Monetary Standard

The U.S. monetary standard has evolved pragmatically rather than by conscious design. The current standard arose out of the consistent effort by the Federal Open Market Committee (FOMC) under Paul Volcker and Alan Greenspan to re-anchor inflationary expectations unmoored by the experience with stop-go policy. Consistency under duress achieved credibility. Credibility laid the foundation for the current nominal anchor: an expectation of low, stable trend inflation unaffected by macroeconomic shocks.

Something must "anchor" the public's expectation of the future value of money. For the gold standard, it was the commitment to maintain the par value of gold. Under the gold standard as it existed in the late 19th-century, money received its value from the Bank of England's commitment to maintain in the future a fixed pound price of an ounce of gold. For the contemporaneous money price of gold to be viable, the public had to believe that the Bank would maintain that value in the future.

To achieve the stability in the expected future price level requisite for contemporaneous stability of the price level, the public must believe that the central bank will behave consistently. Over the quarter century of the Volcker-Greenspan era, the Fed did not follow a rule in the sense that it never departed from consistent procedures for setting the funds rate. Nevertheless, the achievement of near price stability derived from an overall consistency of behavior that emerged out of an effort to restore the expectational stability of the earlier commodity standard.

Stop-Go Monetary Policy and the Loss of a Nominal Anchor

Experience with a commodity standard created an expectation of price stability that persisted into the second half of the 20th century. The primacy attached to price stability by the early William McChesney Martin FOMC sustained

that expectation into the 1960s. Subsequently, stop-go policy opportunistically exploited it and, in time, destroyed the nominal anchor provided by the expectation of price stability.

Keynesians emphasized discretionary manipulation of aggregate demand. Because they assumed the existence of an inertia in inflation independent of monetary policy, they believed that subject to the inflation-unemployment trade-offs of the Phillips curve, the central bank could manipulate aggregate nominal demand to smooth fluctuations in real output. The exercise of discretion destroyed the prior nominal expectational stability.

Sherman Maisel, a member of the Board of Governors from 1965 until 1972, expressed the Keynesian view in 1973:

> There is a trade-off between idle men and a more stable value for the dollar. A conscious decision must be made as to how much unemployment and loss of output is acceptable in order to get smaller price rises. Some price increases originate on the cost side or in particular industries. These cannot be halted by monetary policy, which acts principally on the overall aggregate demand for goods and services. ... [E]xperience ... shows that without some type of government intervention in the price-wage bargains struck by labor and industry, the trade-off between inflation and unemployment is unsatisfactory.

Starting with the Kennedy and Johnson appointments to the Board of Governors, Keynesian views became increasingly prevalent within the FOMC. According to these views, monetary policy should aim for full employment, almost universally assumed to occur at a 4 percent unemployment rate or less. This figure benchmarked potential output. By 1970, elimination of the resulting presumed negative output gap (actual minus potential output) became a national and an FOMC objective. Furthermore, a nonmonetary view of inflation led the FOMC to believe that monetary policy could be stimulative without increasing inflation as long as the output gap was negative. The inflation that did occur with unemployment in excess of 4 percent had to arise from cost-push inflation. Failure to accommodate such inflation would require high unemployment.

The loss of expectational stability began in 1966 when the FOMC, unlike 1957, did not move in a sustained way to eliminate nascent inflation. Bond yields began a long, irregular climb to the low double-digit figures reached in the early 1980s. They fell briefly during the 1970 recession but resumed rising in spring 1971. The Nixon administration wanted rapid money supply growth to stimulate output sufficiently to reduce the unemployment rate to 4.5 percent by summer 1972. Arthur Burns, FOMC chairman, campaigned for wage and price controls as the price of stimulative monetary policy. In their absence, inflationary expectations, Burns contended, would counter the stimulative effects of expansionary policy. On Aug. 15, 1971, Nixon delivered the controls Burns wanted and Burns obliged with expansionary monetary policy.

Charles Walker, treasury undersecretary, later summarized the forces leading the Nixon administration to adopt wage and price controls:

> [I]nflationary expectations ... began to come back on us last winter after we had them under some control. Interest rates were going down, and then [they] shot back up again. ... [L]abor tended to leapfrog into the future and get three-year contracts to guard against additional inflation. Inflationary expectations are what really got us.

Keynesian aggregate demand management relied on inertia in actual and expected inflation as the lever with which increases in aggregate nominal demand lowered unemployment. By the end of the 1970s, that apparent inertia disappeared. The public's response to price controls offered an early example. Initially, their imposition did assuage inflationary fears and permit stimulative monetary policy. However, as George Shultz, treasury secretary in the Nixon administration, wrote in 1978:

> Once the suspicion of permanence sets in, gamesmanship develops between the private and public sectors. It becomes apparent that the controls process is not a one-way street in which the government does something to the private sector; rather, it is a two-way street, with the government taking an action, the private sector reacting to it, the government reacting in turn, and so forth. It is a continual process of interplay and interrelations through which those "controlled" develop ways of doing whatever they really want to do.

To achieve the stability in the expected future price level requisite for contemporaneous stability of the price level, the public must believe that the central bank will behave consistently.

Apart from wartime, before 1965, the United States had never experienced sustained high inflation. Experience with a commodity standard had conditioned the public to expect stationarity in prices. However, the sustained rise in inflation produced by stop-go monetary policy changed expectations. As the public learned that policy did not provide for stationarity in either the price level or the inflation rate, an increase in expected inflation increasingly offset the stimulative effect of the expansionary policy followed in the go phases of stop-go policy. By 1979, the Fed found itself operating in the world described by Robert Barro and David Gordon (in 1983) and Finn Kydland and Edward C. Prescott

(in 1977) where the public believes that the central bank possesses an incentive to raise inflation to lower unemployment below its sustainable value. Forward-looking expectations on the part of the public offset the stimulative effect of monetary policy on the unemployment rate.

Herbert Stein, Council of Economic Advisers chairman in the Nixon administration, foresaw in 1974 the environment that Volcker inherited upon becoming FOMC chairman in 1979:

> If policy or external events slow down the growth of demand, price and wage increases abate little if at all, as everyone is looking across the valley to the next surge of inflation. Because price and wage increases persist at a high rate employment suffers, and governments are driven or tempted to prop up demand, validating the expectation of continued or ever-accelerating inflation.

In 1980, Paul Volcker observed:

> [T]he idea of a sustainable "trade-off" between inflation and prosperity ... broke down as businessmen and individuals learned to anticipate inflation, and to act in this anticipation. ... The result is that orthodox monetary or fiscal measures designed to stimulate could potentially be thwarted by the self-protective instincts of financial and other markets. Quite specifically, when financial markets jump to anticipate inflationary consequences, and workers and businesses act on the same assumption, there is room for grave doubt that the traditional measures of purely demand stimulus can succeed in their avowed purpose of enhancing real growth.

Alan Greenspan made the same point in congressional testimony in 1993:

> The effects of policy on the economy depend critically on how market participants react to actions taken by the Federal Reserve, as well as on expectations of our future actions. ... [T]he huge losses suffered by bondholders during the 1970s and early 1980s sensitized them to the slightest sign ... of rising inflation. ... An overly expansionary monetary policy, or even its anticipation, is embedded fairly soon in higher inflationary expectations and nominal bond yields. Producers incorporate expected cost increases quickly into their own prices, and eventually any increase in output disappears as inflation rises.

A New Nominal Anchor

By summer 1979, the United States had lost the nominal anchor provided by a residual expectation of inflation stationarity. The bond rate fluctuated widely at a level that exceeded 10 percent until December 1985. The persistent effort to change the inflationary expectations of the public, unmoored in the prior period of stop-go monetary policy, formed the crucible in which Volcker and Greenspan forged a new monetary standard. At the time, the change to a preemptive policy of raising the funds rate in the absence of rising inflation engendered fierce criticism. The abandonment of aggregate-demand management in favor of stabilizing inflationary expectations was a departure for unknown shores.

Volcker and Greenspan had to reduce the expectation of high inflation manifested in the high level of bond rates. Furthermore, financial markets had come to associate inflation shocks (relative price shocks that pass through to the price level) and positive growth gaps (above-trend real output growth) with increases in trend inflation. After the initial disinflation that brought inflation down to 4 percent in 1983, the FOMC still had to convince markets that a go phase would not follow a stop phase. It had to forego expansionary policy early during economic recovery when inflation had fallen but unemployment had not yet returned to full employment. The Volcker-Greenspan expected-inflation/growth gap policy emerged in 1983 when the FOMC raised the funds rate in response to rising bond rates despite the existence of high unemployment and falling inflation. Greenspan reconfirmed the policy during the "jobless recovery" from the 1990 recession when the FOMC lowered the funds rate only gradually to work down the inflationary expectations embodied in long-term bond rates.

As a consequence of responding to the increases in bond rates produced by positive growth gaps, the FOMC replaced an output-gap target with a growth-gap indicator. It raised the funds rate in response to sustained above-trend growth rather than waiting until a perceived negative growth gap approached zero and inflation rose. The more expeditious movement in the funds rate eventually convinced markets that the FOMC would keep real growth in line with potential growth promptly enough to prevent increases in inflation. As a result, in response to shocks, market participants began to move the forward real interest rates embodied in the yield curve continuously in a way effectively estimated to return real output to potential. The alternation of intervals of stimulative and restrictive monetary policy disappeared. Ironically, allowing the price system to work rather than attempting to improve upon it produced more rather than less economic stability. **RF**